

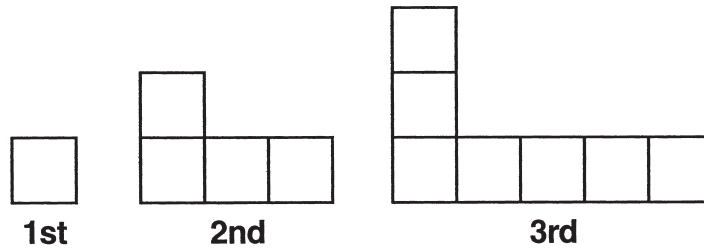
Mathematics, Grade 8

- 5 A hole in a piece of metal has a diameter of $3\frac{1}{2}$ inches. Which of the following pipes is the largest that will fit through the hole?
- A. a pipe with a diameter of $3\frac{3}{8}$ inches
 - B. a pipe with a diameter of $3\frac{7}{8}$ inches
 - C. a pipe with a diameter of $3\frac{5}{16}$ inches
 - D. a pipe with a diameter of $3\frac{7}{16}$ inches

Reporting Category for Item 5: Number Sense and Operations (p. 285)

Session 1, Short-Answer Questions

- 6 Each arrangement in this pattern is made up of tiles.



How many tiles will be in the 6th arrangement in the pattern?

Reporting Category for Item 6: *Patterns, Relations, and Algebra* (p. 286)

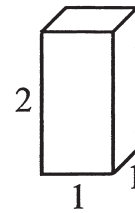
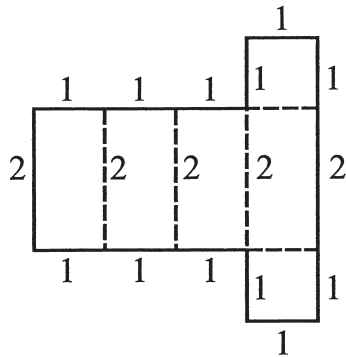
- 7 Compute:

$$8 - (-5 + 3 \times 7) =$$

Reporting Category for Item 7: *Number Sense and Operations* (p. 285)

Session 1, Open-Response Question

- 8 The pattern shown below is for a square prism. The lengths of the line segments in the pattern were chosen so that the pattern could be folded along the dotted lines into the prism shown.



- Make a sketch of a pattern for a triangular prism. Label **each** line segment with a length that will make it possible to fold the pattern into the triangular prism.
- Make a sketch of a pattern for a cylinder. Label **each** line segment and diameter in your pattern with a length that will make it possible to create the cylinder from the pattern.

Reporting Category for Item 8: **Geometry** (p. 287)